

AMENDMENTS TO THE CLAIMS

- 1 1. (Currently Amended) A method of managing a distributed transaction, the method
 2 comprising the steps of:
 3 gathering latency information by monitoring latency of a network;
 4 generating one or more time period values based on said latency information;
 5 determining whether to terminate distributed transactions based on said one or more
 6 time period values;
 7 determining whether said latency information indicates that changes in the latency of
 8 said network satisfy adjustment criteria; ~~and~~
 9 if said latency information indicates that changes in the latency of said network
 10 satisfy adjustment criteria, then adjusting said one or more time period
 11 values;
 12 determining to undertake commitment of said distributed transaction; and
 13 after determining to undertake commitment of said distributed transaction,
 14 determining whether to terminate said distributed transaction based on said
 15 one or more time period values.
- 1 2. (Original) The method of Claim 1, wherein a participant participating in said
 2 distributed transaction executes a transaction from said distributed transaction and
 3 terminates said transaction based on termination criteria that includes at least one
 4 criterion based on a particular value from said one or more time period values.
- 1 3. (Original) The method of Claim 2, wherein said distributed transaction is managed by
 2 a coordinator that cooperates with said participant to execute the distributed
 3 transaction by communicating messages with the participant over the network.
- 1 4. (Original) The method of Claim 3, wherein the step of communicating with the
 2 participant over the network is performed using a stateless protocol.

- 1 5. (Original) The method of Claim 4, wherein the stateless protocol is HTTP or HTTPS.
- 1 6. (Original) The method of Claim 3, wherein said particular value is based on a period
2 of time between when a message is transmitted between said coordinator and said
3 participant and when an acknowledgement that the message has been received is
4 received by the originator of the message.
- 1 7. (Original) The method of Claim 1, wherein:
2 said one or more time period values includes a particular value;
3 the step of monitoring includes generating a set of one or more transit times, wherein
4 each of said set of one or more transit times reflects a period of time between
5 when a message is transmitted over the network from a sender to a receiver
6 and when the sender receives an acknowledgement from the receiver that the
7 receiver has received the message; and
8 wherein said adjustment criteria includes a criterion that each of said set of one or
9 more transit times lie outside a range associated with said particular value.
- 1 8. (Original) The method of Claim 7, wherein the step of generating a set of one or more
2 transit times includes the step of generating at least two transit times.
- 1 9. (Original) The method of Claim 7, wherein the step of generating a set of one or more
2 transit times is performed by pinging a server connected to a particular network.
- 1 10. (Original) The method of Claim 2, further including the step of determining a
2 transaction execution threshold period that reflects a period of time needed for said
3 participant to execute operations for transactions, wherein said particular value is
4 based on said transaction execution threshold period.
- 1 11. (Currently Amended) The method of Claim ~~1~~2, wherein:
2 said transaction specifies a modification to an item of data; and

3 said participant determines whether said transaction satisfies termination criteria
 4 before allowing another modification specified by another transaction for said
 5 item of data.

1 12. (Currently Amended) A method of managing a distributed transaction, the method
 2 comprising the steps of:
 3 determining a set of one or more transaction execution periods for transactions
 4 executed by a participant that participates in distributed transactions, wherein
 5 each transaction execution period of said set of one or more transaction
 6 execution periods reflects the period of time that elapsed for said participant to
 7 execute said each transaction;
 8 if a difference between each of said set of one or more transaction execution periods
 9 and a transaction execution threshold period satisfies adjustment criteria, then
 10 adjusting said transaction execution threshold period;
 11 wherein termination criteria is based on said transaction execution threshold period;
 12 and
 13 wherein termination criteria is used to for determine determining whether to terminate
 14 said distributed transaction is based on after determining to undertake
 15 commitment of said distributed transaction execution threshold period.

1 13. (Original) The method of Claim 12, wherein said adjustment criteria include a
 2 criterion that said difference is so great that each of said set of one or more
 3 transaction execution periods lies outside a range based on said transaction execution
 4 threshold period.

1 14. (Original) The method of Claim 12, further including the steps of
 2 monitoring a network for changes in latency of the network; and

3 generating one or more time period values based on said changes in latency, wherein
4 said termination criteria include a criterion based on said one or more time
5 period values.

1 15. (Currently Amended) A method of managing a distributed transaction, the method
2 comprising the steps of:

3 monitoring latency of a network, wherein said latency of said network is used to
4 generate one or more time period values used to determine whether to
5 terminate distributed transactions; and
6 if changes in latency satisfy adjustment criteria, then adjusting said one or more time
7 period values used to ~~determine~~for determining whether to terminate said
8 distributed transaction after determining to undertake commitment of said
9 distributed transaction.

1 16. (Currently Amended) A computer-readable medium carrying one or more sequences
2 of instructions for managing a distributed transaction, wherein execution of the one or
3 more sequences of instructions by one or more processors causes the one or more
4 processors to perform the steps of:

5 gathering latency information by monitoring latency of a network;
6 generating one or more time period values based on said latency information;
7 determining whether to terminate distributed transactions based on said one or more
8 time period values;
9 determining whether said latency information indicates that changes in the latency of
10 said network satisfy adjustment criteria;~~and~~
11 if said latency information indicates that changes in the latency of said network
12 satisfy adjustment criteria, then adjusting said one or more time period values;
13 determining to undertake commitment of said distributed transaction; and

14 after determining to undertake commitment of said distributed transaction,
15 determining whether to terminate said distributed transaction based on said
16 one or more time period values.

1 17. (Original) The computer-readable media of Claim 16, wherein a participant
2 participating in said distributed transaction executes a transaction from said
3 distributed transaction and terminates said transaction based on termination criteria
4 that includes at least one criterion based on a particular value from said one or more
5 time period values.

1 18. (Original) The computer-readable media of Claim 17, wherein said distributed
2 transaction is managed by a coordinator that cooperates with said participant to
3 execute the distributed transaction by communicating messages with the participant
4 over the network.

1 19. (Currently Amended) A computer-readable medium carrying one or more sequences
2 of instructions for managing a distributed transaction, wherein execution of the one or
3 more sequences of instructions by one or more processors causes the one or more
4 processors to perform the steps of:

5 determining a set of one or more transaction execution periods for transactions
6 executed by a participant that participates in distributed transactions, wherein
7 each transaction execution period of said set of one or more transaction
8 execution periods reflects the period of time that elapsed for said participant to
9 execute said each transaction;

10 if a difference between each of said set of one or more transaction execution periods
11 and a transaction execution threshold period satisfies adjustment criteria, then
12 adjusting said transaction execution threshold period;

13 wherein termination criteria is based on said transaction execution threshold period;

14 and

15 wherein termination criteria is used to determine ~~for determining~~ whether to terminate
 16 said distributed transaction ~~is based on~~ after determining to undertake
 17 commitment of said distributed transaction ~~execution threshold period~~.

1 20. (Currently Amended) A computer-readable medium carrying one or more
 2 sequences of instructions for managing a distributed transaction, wherein
 3 execution of the one or more sequences of instructions by one or more processors
 4 causes the one or more processors to perform the steps of:
 5 monitoring latency of a network, wherein said latency of said network is used to
 6 generate one or more time period values used to determine whether to
 7 terminate distributed transactions; and
 8 if changes in latency satisfy adjustment criteria, then adjusting said one or more
 9 time period values ~~used to determine~~ for determining whether to terminate
 10 said distributed transaction after determining to undertake commitment of
 11 said distributed transaction.

1 21. (Previously Presented) The computer-readable medium of Claim 18, wherein the step
 2 of communicating with the participant over the network is performed using a stateless
 3 protocol.

1 22. (Previously Presented) The computer-readable medium of Claim 21, wherein the
 2 stateless protocol is HTTP or HTTPS.

1 23. (Previously Presented) The computer-readable medium of Claim 18, wherein said
 2 particular value is based on a period of time between when a message is transmitted
 3 between said coordinator and said participant and when an acknowledgement that the
 4 message has been received is received by the originator of the message.

1 24. (Previously Presented) The computer-readable medium of Claim 16, wherein:
 2 said one or more time period values includes a particular value;

3 the step of monitoring includes generating a set of one or more transit times, wherein
4 each of said set of one or more transit times reflects a period of time between
5 when a message is transmitted over the network from a sender to a receiver
6 and when the sender receives an acknowledgement from the receiver that the
7 receiver has received the message; and

8 wherein said adjustment criteria includes a criterion that each of said set of one or
9 more transit times lie outside a range associated with said particular value.

1 25. (Previously Presented) The computer-readable medium of Claim 24, wherein the step
2 of generating a set of one or more transit times includes the step of generating at least
3 two transit times.

1 26. (Previously Presented) The computer-readable medium of Claim 24, wherein the step
2 of generating a set of one or more transit times is performed by pinging a server
3 connected to a particular network.

1 27. (Previously Presented) The computer-readable medium of Claim 17, the steps further
2 including the step of determining a transaction execution threshold period that reflects
3 a period of time needed for said participant to execute operations for transactions,
4 wherein said particular value is based on said transaction execution threshold period.

1 28. (Currently Amended) The computer-readable medium of Claim ~~16~~17, wherein:
2 said transaction specifies a modification to an item of data; and
3 said participant determines whether said transaction satisfies termination criteria
4 before allowing another modification specified by another transaction for
5 said item of data.

1 29. (Previously Presented) The computer-readable medium of Claim 19, wherein said
2 adjustment criteria include a criterion that said difference is so great that each of said
3 set of one or more transaction execution periods lies outside a range based on said
4 transaction execution threshold period.

1 30. (Previously Presented) The computer-readable medium of Claim 19, the steps further
2 including the steps of:
3 monitoring a network for changes in latency of the network; and
4 generating one or more time period values based on said changes in latency, wherein
5 said termination criteria include a criterion based on said one or more time
6 period values.